

Named Areas of Interest Development Needs Refined Process

by CPT William Watts and CPT Timothy Lee

Small-group leaders teaching at the Cavalry Leader's Course (CLC) have identified an issue with students grasping the concept of named areas of interest (NAI) development – specifically, when the reconnaissance objective is not “threat”-focused. Students tend to draw many NAIs on the map that they, as staff and commanders, want more information about. Unfortunately, this happens with little thought as to how it relates to priority intelligence requirements (PIRs), indicators or the execution decisions on the battlefield. This inevitably leads to an overabundance of NAIs drawn around anything and everything, with the idea that we need to “see everything.”

Observations from across the classroom environment at CLC, the Maneuver Pre-Command Course (MPCC) and the combat-training centers (CTCs) clearly show the lack of understanding of the relationship between PIRs and NAIs. Staffs and commanders frequently confuse what they “want to know” with what they “need to know” to make decisions. As a result, the information-collection (IC) plan is not developed completely because of issues that arise from the inability to focus IC through proper NAI development.

Unlike engagement-area (EA) development, currently there is no solid methodology to develop NAIs. The process is confusing, as doctrine continues to contradict itself. First and foremost, we must understand what NAIs are and why they are important. Field Manual (FM) 3-98, **Reconnaissance and Security Operations**, defines an NAI as “a geospatial area, systems node or link against which information that will satisfy a specific information requirement can be collected. [NAIs] are usually selected to capture indications of adversary courses of action, but they also may be related to conditions of the operational environment.” In short, we understand from this definition that the NAI is developed to help focus our IC on a multitude of different aspects of an operation.

A collection overlay (see FM 3-55, **Information Collection**, Figure 4-2), coupled with the IC matrix (Figure 4-1 in FM 3-55), is vital to the development of the Cavalry squadron's scheme of maneuver. The placement of these NAIs will develop the brigade's collection scheme and, depending on the reconnaissance technique being used, will either drive an execution or adjustment decision for the operational commander. Just as commanders would not haphazardly place EAs, we should not randomly place NAIs. Collection doctrine is not fully developed to support reconnaissance and security (R&S) operations for the Cavalry squadrons.

This article will further describe the methods to define NAIs for terrain, infrastructure and civilian objectives by applying EA development within the existing intelligence preparation of the battlefield (IPB) process.

NAIs in current doctrine

Army Techniques Publication (ATP) 2-01.3, **Intelligence Preparation of the Battlefield**, explains that the development of an NAI is based on Step 4 of the IPB process. Figure 1 demonstrates what to do when our reconnaissance objective is threat-focused.

Using the various enemy courses of action (CoA) developed and overlaying them over one another, we look for differences or indicators among the multiple CoAs. Where those differences occur would then be developed as NAIs. The staff would not place an NAI over any area that has the same templated enemy within those areas, as they are not indicators of a specific CoA.

However, what happens when the reconnaissance objective is not threat-based and the focus is terrain, infrastructure or society? Drawing NAIs around multiple locations that indicate whether the enemy is committing to his most likely or most dangerous CoA would serve little use if our focus is terrain and our reconnaissance objective is the identification of friendly battle positions. The method outlined in ATP 2-01.3's Figure 6-8 (represented in Figure 1) is useful, but it is not thorough enough for the development of a complete IC plan. In a time-constrained environment, this method could be effective if, and only if, the reconnaissance objective is threat-focused. Otherwise, it tends to generate an excess amount of NAIs to collect, and it actually detracts from a complete process to focus reconnaissance.

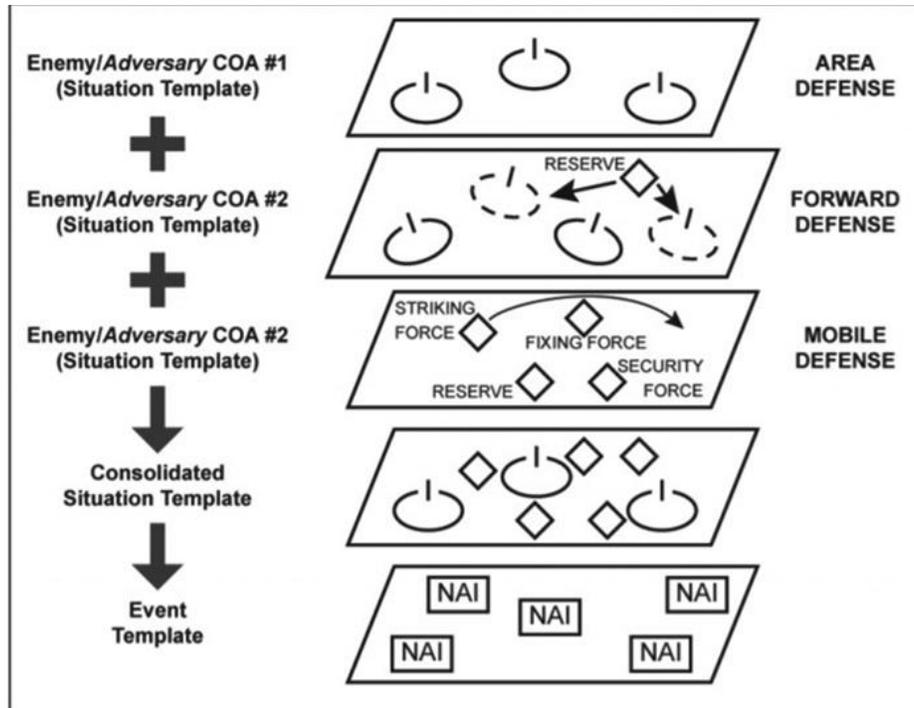


Figure 1. Example of an event template. (Based on Figure 6-8, ATP 2-01.3)

NAI development

The newly published IPB manual acknowledges that NAIs can be focused on the operational environment. However, the doctrine does not address how to develop an NAI that is not threat-focused. This gap in development forces us to interpret and piece together our own methodology by first understanding the relationship among NAIs, PIRs and ultimately the decisions the commander may have to make.

“Reconnaissance operations allow commanders to understand the situation, visualize the battle and make decisions,” states Chapter 1-1 in FM 3-98. “Security operations provide reaction time and maneuver space to enable decisions and protect the force from unanticipated danger.”

The common and critical word in the first paragraph of the first chapter of FM 3-98 is “decisions,” as we ultimately conduct R&S operations to help the commander make decisions to retain his or her position of relative advantage on the battlefield. We accomplish this task by answering PIR and enabling the commander to make timely decisions and direct forces to achieve mission success (see FM 3-98, Chapter 1-24). Chapter 1-25 from FM 3-98 elaborates on this by stating that PIRs identify information about the enemy, terrain, weather and civil considerations the commander considers most important and have impact on future decisions.

In short, we understand that R&S operations are conducted to help the commander make timely decisions on the battlefield by answering questions about the entire operational environment, not solely on the threat as ATP 2-01.3 leads us to believe. The NAI is subsequently developed as the geospatial area where indicators for a PIR will be identified. But which comes first? The NAI? Or the indicator?

NAI development process

We at CLC propose a process to be instituted in the development of NAIs akin to development of an EA. One of the most important aspects of this model is the development of PIR and the identification of the associated decisions to be executed upon answering the PIR. If the staff has not tied these PIRs to decisions the commander could make during the operation, the NAIs developed may trend toward more of what the commander “wants to know” (information requirements) vs. “needs to know” (commander’s critical information requirements) and detract from the actual collection of intelligence.

For this article, we will use a terrain-focused reconnaissance objective with the stated PIR: “Is Objective Red suitable for a battalion-size assembly area?”

Step 1: PIR breakdown to indicators. The key output for this step is the development of indicators and identification, not placement, of possible locations for those indicators. Like Steps 1 and 2 of EA development, Step 1 of NAI development requires analysis. This step will largely call on what the staff develops during mission analysis and subsequently IPB. In EA development, the subordinate unit would first determine avenues of approach and the enemy scheme of maneuver. The NAI development process requires input for this step by first identifying the PIR and then breaking down that PIR into indicators and specific information requirements (SIRs). (Refer to Figure 4-5, FM 3-98.)

Like EA development, identifying the PIR up front enables the unit to identify what it’s trying to collect, giving context and purpose to the operation before drawing NAIs randomly on the map. Through the parallel-planning process, both higher and lower will refine the PIR down to indicators and SIRs.

In our example in Table 1, we had already identified the PIR while conducting reconnaissance for a tactical assembly area (TAA) and now must break it down into indicators. Breaking down the PIR into indicators will allow us to collect across the entire operational environment, including infrastructure, terrain and society, while remaining focused on the actual reconnaissance objective. These indicators must be specific enough so that the Soldier or asset collecting it can determine easily, with little doubt and room for interpretation, what they are seeking.

Simply stating “area must be defensible and suitable” for a battalion assembly area is not nearly specific enough as an indicator. However, by stating that we will have to account for an area that “must be 500m x 1,200m, has a 360-degree unobstructed field of view, avoids being adjacent to higher surrounding terrain or building (ATP 3-37.10, Table E-1) and host-nation security forces (HNSF) are willing to support our occupation of the area,” we now understand what indicators to look for in the area of operations (AO). Now that we understand what the indicators associated with our PIR are, we can start working on where we will be able to identify it within the AO. In this first step of the NAI development process, we begin to build our IC matrix.

PIR	NAI	NAI location	Indicators (what are you looking for?)	SIRs	Collection asset										Timings			Related to		
																			On	Off
1			500m x 1200m																	1
			360-degree unobstructed field of view																	1
			Avoids being adjacent to higher surrounding terrain or building																	1
			HNSF are willing to support our occupation of the area																	1

Table 1. NAI development process Step 1 output.

Step 2: Best plan for collection. The key output for this step is determining which available assets are best to confirm or deny indicators that are anticipated to be in the AO. Now that we have identified what we are collecting on (Table 1), we must now determine what capability can collect on them. During this step, staffs should refine indicators down to SIRs, which will facilitate tasking of capabilities based on the information requirement. The result will facilitate the staff tasking units within the reconnaissance methods of dismounted,

mounted, aerial or reconnaissance by fire and determining if the Cavalry squadron has the resources to answer the PIR. (See Table 2.)

It is important to note that ATP 2-01, *Plan Requirements and Assess Collection*, uses SIRs as more specific indicators and not the actual asset or capability that will facilitate tasking based on the information requirement. FM 3-98 uses SIRs as the actual asset/capability that facilitates tasking. For this article, we use the definition outlined in FM 3-98.

PIR	NAI	NAI location	Indicators (what are you looking for?)	SIRs	Collection asset										Timings			Related to		
																			On	Off
1			500m x 1200m	Scouts/optics, full-motion video (EO/IR)														2300		1
			360-degree unobstructed field of view	Scouts/optics, full-motion video (EO/IR)														2300		1
			Avoids being adjacent to higher surrounding terrain or building	Scouts/optics, full-motion video (EO/IR)														2300		1
			HNSF are willing to support our occupation of the area	Scouts/optics, full-motion video (EO/IR), SIGINT, HUMINT														2300		1

Table 2. NAI development process Step 2 output.

Step 3: Determine where to collect. The key output for this step is the placement of NAIs on the map. Similar to Step 3 of EA development, our process of NAI development in Step 3 would call for the actual placement of the NAI. To complete this step, we must take into account the indicators previously identified in Step 1 of the NAI development process and are now specifically looking at a place or area where the indicators will be collected.

In our example, the local populace is assumed to be large and the Cavalry squadron will not be able to conduct reconnaissance of the area before the latest time information is of value (LTioV), so the NAI must be placed on a specific area where the reconnaissance can be focused. The NAI (NAI 2b) will be placed where the indicator is the most likely to be identified. In this example, we would use political centers, police stations and military bases.

Step 4: Assign asset collection. Key output for this step is the assignment of reconnaissance assets to collect on specified NAIs. Similar to Steps 5 and 6 of EA development, we now assign specific reconnaissance assets to collect on specified NAI through the further refinement of our SIR. This will ultimately drive the refinement of the on and off times as well as the LTioV. The staff must determine which assets will conduct reconnaissance of which NAIs.

Using our given example, we already identified that an indicator to be collected on is the willingness of the HNSF to support our occupation of the TAA. We know that both ground and aerial assets can collect so we identify these as potential methods of collection. However, while aerial-reconnaissance methods such as unmanned aerial systems (UASs) -- i.e., Shadow -- can observe the government building and the amount of traffic going into and out of that area, it would not actually be capable of determining the willingness of the population to support a TAA as there is zero human interaction. In this situation, based off the identified indicator, using dismounted and mounted methods of reconnaissance -- such as the all-weather scout with signals intelligence (SIGINT)/human intelligence (HUMINT) (multi-functional team) capability -- are the best assets and capabilities to collect the desired information.

PIR	NAI	NAI location	Indicators (what are you looking for?)	SIRs	Collection asset											Timings			Related to		
																			On	Off	LTIoV
1	1,2		500m x 1200m	Scouts/optics, full-motion video (EO/IR)															2300		1
	1a		360-degree unobstructed field of view	Scouts/optics, full-motion video (EO/IR)															2300		1
	1a, 2a		Avoids being adjacent to higher surrounding terrain or building	Scouts/optics, full-motion video (EO/IR)															2300		1
	2b		HNSF are willing to support our occupation of the area	Scouts/optics, full-motion video (EO/IR), SIGINT, HUMINT															2300		1

Table 3. NAI development process Step 3 output.

PIR	NAI	NAI location	Indicators (what are you looking for?)	SIRs	Collection asset											Timings			Related to		
					Troop A	Troop B	Troop C	Raven	Prophet	HUMINT	ERT	Q-53	Q-50	Shadow	CBRN platoon	On	Off	LTIoV	DP	PIR	
1	1, 2		500m x 1200m	Scouts/optics, full-motion video (EO/IR)	X	X	X	X											1500	2300	1
	1a		360-degree unobstructed field of view	Scouts/optics, full-motion video (EO/IR)	X	X	X	X											1900	2300	1
	1a, 2a		Avoids being adjacent to higher surrounding terrain or building	Scouts/optics, full-motion video (EO/IR)	X	X	X	X											1500	2300	1
	2b		HNSF are willing to support our occupation of the area	Scouts/optics, full-motion video (EO/IR), SIGINT, HUMINT	X	X	X	X			R								1800	2300	1

Table 4. NAI development process Step 4 output.

Once the first four steps of the NAI development process is complete, the IC matrix and overlay are also complete.

Step 5: Assess risk to collection. The key output of this step is the implementation of reconnaissance management. While Step 7 of EA development rehearses operations in the EA, Step 5 of the NAI development process assesses the risk to collection. The staff looks at the completed IC overlay and matrix and determines where, if any, risks to collection exist. Then, the staff develops a plan to mitigate the risks as needed.

In our example, if a UAS was tasked to observe NAI 2b (the government building identified in Step 3), it could gather information and later cue the dismounted reconnaissance element or the SIGINT/HUMINT team to the refined location with the appropriate reconnaissance tempo.

Example summary

Throughout this article, we used a terrain-focused reconnaissance objective and the PIR of “Is Objective Red suitable for a battalion-size assembly area?” The steps we developed are:

- Step 1 of the NAI development process helped us refine our PIR into indicators of an area measuring 500 meters x 1,200 meters, with a government building in the vicinity.
- Step 2 helped us determine that scouts/optics, UAS and SIGINT/HUMINT can collect against these indicators.
- Step 3 used Step 1 and 2 to develop the actual NAI on the map, in which we determined NAI 2b was most suitable.
- Step 4 helped us assign specific assets guided by the SIR identified in Step 2 to each NAI. It also helped us understand that SIGINT/HUMINT assets are better suited for collecting against the willingness of HNSF.
- Step 5 helped us see the complete picture and determine that if we used UAS to collect in NAI 2b, we may have to use cueing to help answer our PIR.

Had we used the current threat-focused doctrine in ATP 2-01.3's Figure 6-8, we would never have come to the conclusion that NAI 2b was the ideal location for a battalion-size TAA, as we would have become focused on the threat that exists in the AO and not the actual terrain-based reconnaissance objective.

Conclusion

The NAI development process is a proposed methodology based on observed trends at CLC, MPCC and CTCs to address an existing gap in doctrine. Current doctrine accounts for collection that is threat-focused, but it is not applicable for terrain, infrastructure or terrain-based reconnaissance objectives. Therefore, current doctrine tends to lead toward an overabundance of irrelevant NAIs due to the lack of understanding of the relationship among PIR, indicators and NAIs.

We are proposing this simple five-step process that uses existing doctrine (IC collection overlay and IC matrix) but specifies and provides more clarity to the actual desired output. By breaking down PIR into indicators, planning for the best method of collection, determining where to collect, assigning assets to collect and then assessing risk to collection, commanders and staff will ultimately ensure each NAI is properly developed.

NAIs are developed only after indicators are developed and not before. By doing this, we can narrow the actual focus of the reconnaissance operation (threat, infrastructure, terrain or society) and then draw our NAIs. This will inevitably help collection assets answer PIRs and help the commander make decisions to retain his or her position of relative advantage on the battlefield.

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Acronym Quick-Scan

ACR – armored cavalry regiment

AO – area of operations

ATP – Army techniques publication

BCT – brigade combat team

BOLC – Basic Officer Leadership Course

CBRN – chemical, biological, radioactive and nuclear

CLC – Cavalry Leader's Course

CoA – course of action

CTC – combat training center

EA – engagement area

EO – electro-optical

FM – field manual

HNSF – host-nation security forces

HUMINT – human intelligence

IC – information collection

IPB – intelligence preparation of the battlefield

IR – infrared

LTioV – latest time information is of value

MPCC – Maneuver Pre-Command Course

NAI – named area of interest

PIR – priority intelligence requirement

R&S – reconnaissance and security

SIGINT – signals intelligence

SIR – specific information requirement

TAA – tactical assembly area

UAS – unmanned aerial system